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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/990,133

11/21/2001

Petri Boman

915-400

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08/01/2006

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EXAMINER

PHAM, TUAN

ART UNIT

PAPER NUMBER

2618

DATE MAILED: 08/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/990,133

Applicant(s)

BOMAN ET AL.

Examiner

TUAN A. PHAM

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8, 10-21 and 25-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8, 10-21, and 25-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 06/09/2006 has been entered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1-4, 6-7, 17, and 25-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nilsson (U.S. Patent No.: 6,400,967) in view of Cockerill et al. (U.S. patent No.: 6,503,005, hereinafter, "Cockerill").

Regarding claims 1, 17, 25, and 28, Nilsson teaches a method and a housing for an electronic device comprising a unitary tubular body (see figure 2, tubular housing 3) having an open end (see figure 3, remove cap 4) for insertion of electronic components therein (see figure 3, open the remove cap 4 to insert electronic package 40 or battery pack 38), wherein the electronic component are substantially housed by the unitary body upon insertion (see figure 3, col.5, ln.25-50, col.6, ln.7-41).

It should be noticed that Nilsson fails to teach the body having a plurality of apertures in one face for receiving the keys of a keymat mounted on an inner wall of the body, and an opening in the other face opposite the apertures to receive a battery pack. However, Cockerill teaches the body having a plurality of apertures in one face for receiving the keys of a keymat mounted on an inner wall of the body (see figure 1, keyboard case work is included a plurality apertures to receive the keys 6, col.6, ln.21-60), and an opening in the other face opposite the apertures to receive a battery pack (see figure 1, figure 4, battery cover 12, battery housing 28, col.6, ln.21-60).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Cockerill into view of Nilsson

in order to make the cellular phone in the form of small and inexpensive as suggested by Nilsson at column 2, lines 23-26.

Regarding claims 2 and 29, Nilsson further teaches a housing including a member for closing the open end of the tubular body (see figure 2, remove cap 4).

Regarding claim 3, Nilsson further teaches a housing wherein the member is configured to support electronic components thereon (see figure 3, electronic package 40).

Regarding claim 4, Cockerill further teaches a housing wherein the member includes a support for locating and retaining a printed circuit board thereon (see figure 2, col.6, ln.21-61).

Regarding claim 6, Nilsson further teaches a housing wherein a portion of the inner peripheral wall of the member includes a recess to receive a transducer module (see figure 3, earphone 20).

Regarding claim 7, Nilsson further teaches a housing including a guide on the body to receive and support electronic components mounted on the member (see figure 3, it is obvious the inside housing 3 has a guide to hold the electronic package 40).

Regarding claim 26, Nilsson further teaches a method wherein the housing is extruded (see figure 3).

Regarding claim 27, Nilsson further teaches a method wherein the housing is formed from sheet metal. It is obvious the housing can be used with any material.

4. Claims 5, 8, 10-16, and 18-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nilsson (U.S. Patent No.: 6,400,967) in view of Cockerill et al. (U.S. patent No.: 6,503,005, hereinafter, "Cockerill") as applied to claim 1 above, and further in view of Kubo (U.S. Patent No.: 6,580,923).

Regarding claim 5, Nilsson, and Cockerill, in combination, fails to teach a housing wherein the support includes an integrally moulded clip to receive the edge of a printed circuit board and a location spigot to support the underside thereof. However, Kubo teaches such features (see figure 3, it is obvious the housing portion 32 should be included a moulded clip to support the PCB 36 within the housing).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Kubo into view of Nilsson, and Cockerill in order to make the cellular phone in the form of small and inexpensive as suggested by Nilsson at column 2, lines 23-26.

Regarding claim 8, Kubo further teaches a rail (see col.5, ln.65).

Regarding claim 10, Kubo further teaches a housing wherein the body includes means to releasably secure a keymat retaining plate over the keymat (see figure 3, key group sheet 31, col.4, ln.46-55).

Regarding claim 11, Kubo further teaches a housing wherein the means comprises an integrally formed tab on the body for location of the retaining plate there under (see figure 3, key group sheet 31, col.4, ln.46-55).

Regarding claim 12, Kubo further teaches a housing wherein the retaining plate (i.e., flexible printed circuit board) is formed from a resilient flexible material and is a snap fit beneath the integrally formed tab on the body (see figure 3, col.7, ln.62-67).

Regarding claim 13, Kubo further teaches a housing wherein a portion of the body overlaps the member, the body and member including co-operating parts (i.e., handle) to mount the member on the body (see figure 4, handle 52c-3, col.6, ln.30-52).

Regarding claim 14, Kubo further teaches a housing wherein the co-operating parts includes a flange on the member that forms an interference fit with the body (see figure 6, 52b-2, col.6, ln.19-27).

Regarding claim 15, Nilsson further teaches a housing a lock for releasable securing the member mounted to the body (see col.5, ln.40-50).

Regarding claim 16, Nilsson further teaches a housing wherein said lock includes an aperture in the member and a boss in the body, fastening means being insertable through the aperture for location in the boss (see col.5, ln.40-50).

Regarding claim 18, Nilsson further teaches mobile telecommunication device (see col.1, ln.35-37).

Regarding claim 19, Kubo further teaches a housing including a key mat, a key mat retaining plate and a battery pack, the retaining plate being configured such that the key mat is biased against the housing by the retaining plate when the battery pack is mounted in the housing (see figure 3, col.4, ln.46-67).

Regarding claim 20, Kubo further teaches a housing wherein the retaining plate includes resiliently deformable regions raised out of the plane of the plate, said regions

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being deflected back towards the plane of the plate by the battery pack mounted in the housing, thereby biasing the key mat against the housing (see figure 6, col.6, ln.1-26).

Regarding claim 21, Kubo further teaches a housing wherein the resiliently deformable regions are a plurality of spaced parallel ribs (see figure 3, col.6, ln.1-27).

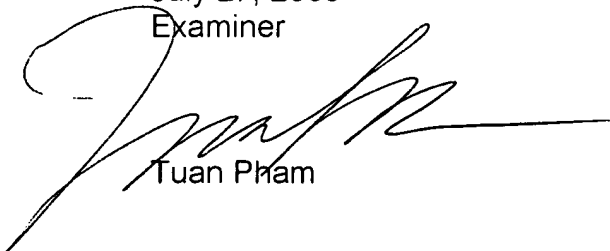
Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan A. Pham whose telephone number is (571) 272-8097. The examiner can normally be reached on Monday through Friday, 8:30 AM-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Anderson can be reached on (571) 272-4177. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have question on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Art Unit 2618
July 27, 2006
Examiner



Tuan Pham

Supervisory Patent Examiner
Technology Center 2600



Matthew Anderson